

**CLAIMS**

1. In combination, a mercury arc lamp including an arc tube, said arc tube being mounted in a reflector bulb adapted to be screwed into a standard light bulb socket and an electronic ballast for ballasting said mercury arc lamp.  
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2. The combination of claim 1, wherein said mercury arc lamp is adapted to consume 60 W of power or less.
- 10 3. The combination of claim 1, wherein said standard light bulb socket is further provided with a pinch clamp fixture for clamping said socket to an object, said fixture being connected to said electronic ballast.
- 15 4. The combination of claim 1, wherein said electronic ballast is housed in a fixture and said fixture is integral to said socket so that said combination is adapted to be placed on a desk.
- 20 5. The combination of claim 4, wherein said housing further includes a timer operatively connected to said electronic ballast.
6. A method for projecting UV radiation comprising the steps of:
  - (c) providing a reflector with a mercury arc tube, said reflector having a base screwed into a standard light socket holder and an opposite end; and
  - 25 (d) providing an electronic ballast for ballasting said mercury arc lamp; wherein when said lighting said mercury arc tube is lit, UV radiation produced by said lit mercury arc tube is projected out of said opposite end.
- 30 7. A method for providing UVB radiation inside an enclosure, said method including the steps of:

- (d) providing a reflector with a mercury arc tube, said reflector having a base screwed into a standard light socket holder and an opposite end;
- (e) placing said reflector proximate said enclosure; and
- 5 (f) providing an electronic ballast for ballasting said mercury arc lamp; wherein when said mercury arc tube is lit, UVB radiation produced by said mercury arc tube is projected out of said opposite end.

8. A method for projecting UVC radiation comprising the steps of:
- 10 (c) providing a reflector with a mercury arc tube, said reflector having a base screwed into a standard light socket holder and an opposite, open end; and
- (d) providing an electronic ballast for ballasting said mercury arc tube; wherein when said mercury arc tube is lit, UVC radiation produced by said
- 15 mercury arc tube is projected out of said opposite, open end.

9. A method for projecting UV radiation for treating skin disorders or for assisting in the production of vitamin D, comprising the steps of:
- 20 (c) providing a reflector with a mercury arc tube, said reflector having a base screwed into a standard light socket holder and an opposite end;
- (d) providing an electronic ballast for ballasting said mercury arc tube; wherein when said mercury arc tube is lit, UV radiation produced by said mercury arc tube is projected out of said opposite end.
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10. A method for projecting UV radiation for use as a germicide, comprising the steps of:
- (c) providing a reflector with a mercury arc tube, said reflector having a base screwed into a standard light socket holder and an opposite end;
- 30 (d) providing an electronic ballast for ballasting said mercury arc tube;

wherein when said mercury arc tube is lit, UV radiation produced by said mercury arc tube is projected out of said opposite end.

5 11. A method for projecting UV radiation for curing materials, comprising the steps of:

(c) providing a reflector with a mercury arc tube, said reflector having a base screwed into a standard light socket holder and an opposite end;

(d) providing an electronic ballast for ballasting said mercury arc tube;

10 wherein when said mercury arc tube is lit, UV radiation produced by said mercury arc tube is projected out of said opposite end.